

GE Healthcare

510(k) Premarket Notification Submission

510(k) Summary

In accordance with 21 CFR 807.92 the following summary of information is provided:

Date: September 21, 2012

Submitter: GE Healthcare

9900 Innovation Dr. Wauwatosa, WI 53226

Contact Person: Bryan Behn

Regulatory Affairs Manager

GE Healthcare, GE Medical Systems Ultrasound and Primary

Care Diagnostics, LLC. Phone: 414-721-4214 Fax: 414-918-8275

Device: Trade Name: C1-6-D Ultrasound Transducer

Common/Usual Name: C1-6-D Ultrasound Transducer

Classification Names: Diagnostic Ultrasound Transducer, 21 CFR 892.1570

Product Code: 90-ITX

Predicate Device(s): K110943 GE LOGIQ E9 Diagnostic Ultrasound System

including C1-5-D transducer

Device Description: The C1-6-D is an ultrasound-imaging device that is attached to a

GE ultrasound imaging system and used for diagnostic imaging. This device does not directly control energy delivered to the patient nor contain any software. The C1-6-D is primarily an abdominal transducer and its primary applications are pediatrics and obstetrics, however it may also be used for other applications

as described in the indications for use.

Intended Use: The device is intended for use by a qualified physician for use

with GE Diagnostic Ultrasound Systems for ultrasound

evaluation of Fetal; Abdominal; Pediatric; Peripheral Vascular;

Urology (including prostate).

Technology: The C1-6-D Transducer employs the same fundamental scientific

technology as its predicate device(s).

<u>Determination of Summary of Non-Clinical Tests:</u>

Substantial Equivalence: The device has been evaluated for acoustic output,

biocompatibility, cleaning and disinfection effectiveness as well as thermal, electrical, electromagnetic and mechanical safety, and has been found to conform with applicable medical device safety standards. The C1-6-D Transducer and its applications comply



GE Healthcare

510(k) Premarket Notification Submission with voluntary standards:

- 1. IEC60601-1, Medical Electrical Equipment Part 1: General Requirements for Safety
- IEC60601-1-2,Medical Electrical Equipment Part 1-2: General Requirements for Safety – Collateral Standard: Electromagnetic Compatibility Requirements and Tests
- IEC60601-2-37, Medical Electrical Equipment Part 2-37: Particular Requirements for the Safety of Ultrasonic Medical Diagnostic and Monitoring Equipment
- 4. NEMA UD 3, Standard for Real Time Display of Thermal and Mechanical Acoustic Output Indices on Diagnostic Ultrasound Equipment when connected to a GE Ultrasound System
- 5. ISO10993-1, Biological Evaluation of Medical Devices- Part 1: Evaluation and Testing
- 6. NEMA UD 2, Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment when connected to a GE Ultrasound System
- 7. ISO14971, Application of risk management to medical devices

The following quality assurance measures were applied to the development of the system:

- Risk Analysis
- Requirements Reviews
- Design Reviews
- Testing on unit level (Module verification)
- Integration testing (System verification)
- Performance testing (Verification)
- Safety testing (Verification)
- Final Acceptance testing (Validation)

Summary of Clinical Tests:

The subject of this premarket submission, C1-6-D Transducer, did not require clinical studies to support substantial equivalence.

Conclusion:

GE Healthcare considers the C1-6-D Transducer to be as safe, as effective, and performance is substantially equivalent to the predicate device(s).



Food and Drug Administration 10903 New Hampshire Avenue Silver Spring, MD 20993

OCT.

5 2012

Mr. Bryan Behn Regulatory Affairs Manager GE Healthcare 9900 Innovation Dr. RP-2138 WAUWATOSA WI 53226

Re: K122921

Trade/Device Name: C1-6-D Diagnostic Ultrasound Transducer

Regulation Number: 21 CFR 892.1570

Regulation Name: Diagnostic ultrasonic transducer

Regulatory Class: II Product Code: ITX

Dated: September 21, 2012 Received: September, 24, 2012

Dear Mr. Behn:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the C1-6-D Diagnostic Ultrasound Transducer, as described in your premarket notification:

Transducer Model Number

C1-6-D

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Jeffrey Ballyns at (301) 796-6105.

Sincerely Yours,

Janine M. Morris

Director

Division of Radiological Health
Office of In Vitro Diagnostics
and Radiological Health

Center for Devices and Radiological Health

huhul O The son

Enclosure(s)



510(k) Number (if known): K122921

GE Healthcare 510(k) Premarket Notification Submission

Device Name:	C1-6-D Diagnostic Ultrasound Tran	nsducer
Indications for Use:		
	ed for use by a qualified physician for for ultrasound evaluation of Fetal; Abnoluding prostate).	
Prescription Use_x_ (Part 21 CFR 801 Su		Over-The-Counter Use_N/A_ (Part 21 CFR 801 Subpart C)
(PLEASE DO NOT	WRITE BELOW THIS LINE - CON IF NEEDED)	TINUE ON ANOTHER PAGE
Concurrence of CDR	H, Office of In Vitro Diagnostic Dev	rices (OIVD)
Muhal	D Doffen	
(Division Sign-Off) Division of Radiolog Office of <i>In Vitro</i> Di 510(k) Number <u>k</u>	gical Devices Division of Flagnostic Device Evaluation and Sa	RadiologicalHealth. Sety office of In Vitro Diagnostics and Radiology Health
	Page 1 of 1	Health



GE Healthcare

510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form **GE C1-6-D Transducer**

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

Intended Use: Diagnostic	intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:								ody as 10		
Clinical Application	<u></u>					Mode of	Operatio	n			
Clinical Application Anatomy/Region of Interest	В	м	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes'	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal/Obstetrics ^[7]	N	N.	N	N.	N	N	N	N	N	N	[5,6,9]
Abdominal ^[1]	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Pediatric	N.	N	N	N	N	N	N	. N	N	N _	[3,5,6,9]
Small Organ ^[2]	<u> </u>								·		
Neonatal Cephalic	<u> </u>	ļ									
Adult Cephalic	<u> </u>		:								
Cardiac Adult	<u> </u>										
Cardiac Pediatric	<u> </u>										
Peripheral Vascular	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Musculo-skeletal Conventional				-							
Musculo-skeletal Superficial											
Other ^[4]	N	N	N	N	N	N	N	N	N	N	[3,5,6,9]
Exam Type, Means of Access							,				
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

aparo:	rindication; P = previousl	v cleared by F	DA	'	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	
lotes:	• •	Renal, GYN/Pe g - Elasticity. rology/Prostat ging	elvic. e	elopment		of In Vitro	(Division sign of Page Diegnostic	Davide Eva	evices suetion and	I Safety	
	[*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.										
	(PLEASE I	O NOT WRITE BE	I OW TH	IS LINE . CON	ITINI IE OI	N ANOTHER	DACE IE NEE	:DED)			
		ce of CDPU									

Murhel DD for Radiologic Health Division of Radiologic Health